

# U.S. Preventive Services Task Force

## Screening for Speech and Language Delay and Disorders in Children

### SCREENING FOR SPEECH AND LANGUAGE DELAY AND DISORDERS IN CHILDREN: CLINICAL SUMMARY OF THE USPSTF RECOMMENDATION

#### What does the USPSTF recommend?

**Children five years or younger without signs or symptoms of speech and language delay and disorders:**

The USPSTF found that the current evidence is insufficient to assess the balance of benefits and harms of screening for speech and language delay and disorders in children.

**Grade: I statement**

#### To whom does the recommendation apply?

This recommendation applies to asymptomatic children five years or younger whose parents or clinicians do not have specific concerns about their speech, language, hearing, or development.

This recommendation does not apply to children with another condition that may cause speech or language impairment (e.g., autism spectrum disorder).

#### What's new?

This updated recommendation is consistent with the 2015 USPSTF recommendation on screening for speech and language delay and disorders in children five years or younger.

#### How to implement this recommendation?

There is insufficient evidence to recommend for or against screening for speech and language delay and disorders in younger children. The USPSTF is calling for more research on the benefits and harms of screening for speech and language delays and disorders, especially in populations known to have the highest burden (Black and Hispanic/Latino children and children from households with low incomes).

Clinicians should use their clinical judgment regarding whether and how to screen for speech and language delay and disorders. Clinicians should also be aware of signs and symptoms of speech and language delays and disorders and listen to any caregiver concerns.

#### What additional information should clinicians know about this recommendation?

The estimated prevalence of speech and language disorders ranges between 3% and 16% of U.S. children and adolescents aged 3 to 21 years. Boys are more than twice as likely to be affected than girls.

There are notable disparities in the prevalence of speech and language delays and disorders, with Black and Hispanic/Latino children and children from households with low incomes having higher rates of speech and language delays and disorders compared with White children.

The USPSTF found adequate evidence on the accuracy of screening tools to detect speech and language delay and disorders. However, there was limited and inconsistent evidence on the effectiveness of interventions on intermediate outcomes such as speech and language domains (e.g., fluency, articulation, and expressive and receptive language) and health outcomes (e.g., improved school performance, social/emotional function, or quality of life).

*continues*

**Note:** The USPSTF recognizes that clinical decisions involve more considerations than evidence alone. Clinicians should understand the evidence but individualize decision-making to the specific patient or situation.

USPSTF = U.S. Preventive Services Task Force.

As published by the USPSTF.

This series is coordinated by Joanna Drowos, DO, contributing editor.

A collection of USPSTF recommendation statements published in *AFP* is available at <https://www.aafp.org/afp/uspstf>.

The full recommendation statement is available at <https://www.uspreventiveservicestaskforce.org/uspstf/recommendation/speech-and-language-delay-and-disorders-in-children-age-5-and-younger-screening>.

The USPSTF recommendations are independent of the U.S. government. They do not represent the views of the Agency for Healthcare Research and Quality, the U.S. Department of Health and Human Services, or the U.S. Public Health Service.

## SCREENING FOR SPEECH AND LANGUAGE DELAY AND DISORDERS IN CHILDREN: CLINICAL SUMMARY OF THE USPSTF RECOMMENDATION *(continued)*

### Why are this recommendation and topic important?

Evidence suggests that many younger children identified with speech and language delay go on to recover without intervention.

However, school-aged children with speech and language delays and disorders may be at increased risk of learning and literacy disabilities, including difficulties with reading and writing. Studies also suggest that children with these conditions may be at higher risk for social and behavioral problems in addition to learning problems, some of which may persist through adulthood.

### Where to read the full recommendation statement?

Visit the USPSTF website (<https://www.uspreventiveservicestaskforce.org/>) or the JAMA Network website (<https://jamanetwork.com/collections/44068/united-states-preventive-services-task-force>) to read the full recommendation statement. This includes more details on the rationale of the recommendation, including benefits and harms; supporting evidence; and recommendations of others.

**Note:** The USPSTF recognizes that clinical decisions involve more considerations than evidence alone. Clinicians should understand the evidence but individualize decision-making to the specific patient or situation.

USPSTF = U.S. Preventive Services Task Force.

## GLOSSARY OF EVIDENCE-BASED MEDICINE AND STATISTICAL TERMS

Term	Definition
Sensitivity	Percentage of patients with disease who have a positive test for the disease in question
Specificity	Percentage of patients without disease who have a negative test for the disease in question
Predictive value (positive [PV+] and negative [PV-])	Percentage of patients with a positive or negative test for a disease who do or do not have the disease in question
Pretest probability	Probability of disease before a test is performed
Post-test probability	Probability of disease after a test is performed
Likelihood ratio (LR)	LR > 1 indicates an increased likelihood of disease, LR < 1 indicates a decreased likelihood of disease. The most helpful tests generally have a ratio of less than 0.2 or greater than 5.
Relative risk reduction (RRR)	The percentage difference in risk or outcomes between treatment and control groups. Example: if mortality is 30% in controls and 20% with treatment, RRR is $(30 - 20)/30 = 33\%$ .
Absolute risk reduction (ARR)	The arithmetic difference in risk or outcomes between treatment and control groups. Example: if mortality is 30% in controls and 20% with treatment, ARR is $30 - 20 = 10\%$ .
Number needed to treat (NNT)	The number of patients who need to receive an intervention instead of the alternative in order for one additional patient to benefit. The NNT is calculated as: $1/ARR$ . Example: if the ARR is 4%, the NNT = $1/4\% = 1/0.04 = 25$ .
Number needed to harm (NNH)	The number of patients who need to receive an intervention instead of the alternative in order for one additional patient to experience an adverse event.
95% CI	An estimate of certainty. It is 95% certain that the true value lies within the given range. A narrow CI is good. A CI that spans 1.0 calls into question the validity of the result.
Systematic review	A type of review article that uses explicit methods to comprehensively analyze and qualitatively synthesize information from multiple studies
Meta-analysis	A type of systematic review that uses rigorous statistical methods to quantitatively synthesize the results of multiple similar studies